

## HIGHLIGHTS

- ✓ **Sensor Length 5 mm**
- ✓ **Accuracy  $\pm 0.05^{\circ}\text{C}$**
- ✓ **Durable and shock resistance**
- ✓ **Customized dimensions available**



## OVERVIEW

With 5mm long sensor, AM1610 series precision industrial PRT provides users an excellence temperature probe with extremely low stem conduction (heat loss along sheath) in precision temperature measurement. It is a great tool for measuring and testing the vertical temperature uniformity of heat sources.

AM1610 uses a special aged and tested 5-mm long sensing element to achieve the best performance in stability and repeatability. A unique assembly procedure provides the best balance among the hysteresis effect, mechanical shock and thermal shock performance.

## FEATURES

- Temperature range:  $-60^{\circ}\text{C}$  to  $160^{\circ}\text{C}$
- Sensor Length: 5 mm
- Accuracy:  $\pm 0.05^{\circ}\text{C}$
- Long term drift:  $\pm 0.04^{\circ}\text{C}$
- Short term stability:  $0.01^{\circ}\text{C}$
- Durable and shock resistance
- Temperature Coefficient 0.00385
- SST sheath
- Quick response time
- Customized dimensions available

## SPECIFICATIONS

Temperature Range	-60°C to 160°C
Resistance at 0 °C	Nominal 100 Ω
Temperature Coefficient	0.00385 Ω/ Ω/°C
Accuracy	±0.05°C
Drift	±0.04°C at 0 °C after 100 hours at 160 °C
Short Term Stability	±0.01°C
Thermal Shock	±0.01°C after 10 times thermal cycles from minimum to maximum temperatures
Hysteresis	<=0.01°C
Self-heating	75 mW/°C
Response Time	4 seconds for 63% response to step change in water moving at 3 feet per second
Measurement Current	0.5 mA or 1 mA
Sensor Length	5 mm
Sensor Location	3 mm from tip
Insulation Resistance	>1000 MΩ at room temperature
Sheath Material	Stainless Steel 316L
Dimension	1610-12: 0.25 inch X 12 inch (6.35 mm X 305 mm) 1610-9: 0.187 inch X 9 inch (4.75 mm X 229 mm)
External Leads	Teflon <sup>™</sup> –insulated copper wire, 4 leads, 2.5 meters
Handle Dimension	1610-12: 15mm (OD) X 65 mm (L) 1610-9: 10mm (OD) X 50 mm (L)
Handle Temperature Range*	-30°C to 150°C
Calibration Options	1610-12-T, PRT with NIST traceable calibration and data 1610-9-T, PRT with NIST traceable calibration and data

\*Handle temperature outside this range will cause damage to the probe.

## OPTIONAL ACCESSORIES

Model	Description
9001	Wooden Carrying Case